BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE.

DIVISION: BYATARAYANAPURA.

SUB DIVISION: VIDYARANYAPURA.

POST-MEASUREMENT

8TH AND PART BILL

ANNEXURE - 1

Name of Work: *Package No. 06 (Consists of 14 Works).*

Est Cost: 1500.00 Lakhs

Work Order: BBMP/EE/BTP/WO/76/2022-23 Dated: 24-11-2022.

Agency: M/s. SMLP Asphalts Prop: Sri B.B. Umesha

BRUHAT BENGALURU MAHANAGARA PALIKE

MEASUREMENT SHEET

RA 8TH AND PART BILL (ANNEXURE - 1)

Name of work:	Package No. 06 (Consists of 14 Works)
Estimated Cost:	Rs. 1500.00 Lakhs
Job Code:	009-23-000003
Head of Account :	P-3877 Amruth Nagarothana Works
Name of Agency:	M/s. SMLP Asphalts, Prop. Sri B B Umesha, No 1265, Next to Andhra Bank, Major Sandeep Unnikrishnan Road, Yalahanka New Town, Bengaluru - 560064.
Work order No:	BBMP/EE/BTP/WO/76/2022-23 Dated: 24-11-2022.

Sl No	Measurements Recarded on : Chainage	Mesurement No.	L	B1	B2	Av.,B	D	Qty	Rate / Unit	Amount
1	Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts and lead I By Manual Means B Cement Concrete Grade M-15 & M-20								Cum	
	Previous Qty Vide 7th and Part Bill Qty =							**95.21**		
	Present Qty =							**NIL**		
2	Removing and refixing stone slabs of drains and pointing in CM (1:3) (Data Rate)								Sqm	
	Previous Qty Vide 7th and Part Bill Qty =							**2911.28**		
	Present Qty =							**NIL**		
3	Removing and refixing of footpath Slab (Data Rate)								Sqm	
	Previous Qty Vide 7th and Part Bill Qty =							**266.40**		
	Present Qty =							**NIL**		
4	Earth work excavation by manual means for drains,canals, waste weir, draft, approach channels, key trenches, foundation of bridges and such simillar works in all kinds of soils , as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete the work.								Cum	
	Previous Qty Vide 7th and Part Bill Qty =							**9610.84**		
	Present Qty Vide Pre-Measurement Page No. =							**901.60**		
	Total Qty =							**10512.44**		
	Deduct Previous Qty =							**-9610.84**		
	Annexure - 1 Present 8th Bill Qty to be Paid =							**901.60**	214.79	**193655.00**
5	Providing granite slabs of selected quality roughly dressed having a size of 7.5cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete.								Sqm	
	Previous Qty Vide 7th and Part Bill Qty =							**1338.23**		
	Present Qty =							**NIL**		

AR-09

AEE (VRP) SD

Sl No	Chainage			Mesurement No.	L	B1	B2	Av.,B	D	Qty	Rate / Unit	Amount
6	Providing B S slabs of selected quality roughly dressed having a size of 10cms thick and fixed in cement mortar (1:6) including fixing curing ete, complete as directed by the Engineer in Charge of the work (Excluding GST and Area Leading Charges) (Data Rate)										Sqm	
			Previous Qty Vide 7th and Part Bill Qty =							42.15		
			Present Qty =							NIL		
7	Providing one line dressing to granite stone slab / granite stone masonry as per specifications as directed by the Engineer in Charge of the work (Excluding GST and Area Leading Charges) (Data Rate)										Sqm	
			Previous Qty Vide 7th and Part Bill Qty =							108.00		
			Present Qty =							NIL		
8	Providing and laying in position plain cement concrete Mix 1:3:6 (M10) for levelling course for all works in foundation. Using 40 mm nominal size graded crushed coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications.										Cum	
			Previous Qty Vide 7th and Part Bill Qty =							1273.89		
			Present Qty Vide Pre-Measurement Page No. =							123.80		
			Total Qty =							1397.69		
			Deduct Previous Qty =							-1273.89		
			Annexure - 1 Present 8th Bill Qty to be Paid =							123.80	6413.65	794010.00
9	Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. M20 (The cost of steel reinforcement & formwork to be paid separately)										Cum	
			Previous Qty Vide 7th and Part Bill Qty =							2695.01		
			Present Qty Vide Pre-Measurement Page No. =							235.68		
			Total Qty =							2930.69		
			Deduct Previous Qty =							-2695.01		
			Annexure - 1 Present 8th Bill Qty to be Paid =							235.68	7236.31	1705454.00
10	Supplying, Fitting and Placing TMT Fe550 bar Reinforcement in sub-structure complete as per Drawing and Technical and as per the Direction of engineer incharge of work										Cum	
			Previous Qty Vide 7th and Part Bill Qty =							166.56		
			Present Qty Vide Pre-Measurement Page No. =							15.02		
			Total Qty =							181.58		
			Deduct Previous Qty =							-166.56		
			Annexure - 1 Present 8th Bill Qty to be Paid =							15.02	106436.07	1598670.00
11	Providing Size Stone masonry with hard stone in foundation & plinth with Cement mortar 1:6 (1 cement : 6 coarse sand)and as per the Direction of engineer incharge of work										Cum	
			Previous Qty Vide 7th and Part Bill Qty =							50.63		
			Present Qty =							NIL		

AE-09

AEE (VRP) SD

Sl No	Chainage		Mesurement No.	L	B1	B2	Av.,B	D	Qty	Rate / Unit	Amount
12	Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork to be paidseparately) Mix 1:2:4 (M15) Using 20 mm nominal size graded crushed coarse aggregates									Cum	
			Previous Qty Vide 7th and Part Bill Qty =						**92.48**		
			Present Qty =						**NIL**		
13	Providing and Fixing pre cast covering Slab 100mm thick made out of CC, Jelly 20mm Down Size with steel reinforcement including form work, curing, including cost of all materials, labour, hire charges of machinery, loading, unloading, lead and lift, transportation etc, complete as per Engineer incharge.									Sqm	
			Previous Qty Vide 7th and Part Bill Qty =						**4856.86**		
	Precast Covering Slab										
	Cross Road 1										
	N/S		1	15.00			0.90		13.50		
			1	6.30			0.90		5.67		
	S/S										
			1	15.00			0.90		13.50		
			1	6.10			0.90		5.49		
	2nd Main Road										
	W/S		1	6.20			0.90		5.58		
			1	16.60			0.90		14.94		
			1	1.80			0.90		1.62		
			1	4.80			0.90		4.32		
			1	4.80			0.90		4.32		
			1	9.00			0.90		8.10		
			1	4.80			0.90		4.32		
			1	5.40			0.90		4.86		
			1	11.00			0.90		9.90		
	N/S										
			1	7.20			0.90		6.48		
			1	7.80			0.90		7.02		
			1	3.60			0.90		3.24		
			1	1.20			0.90		1.08		
			1	1.20			0.90		1.08		
			1	3.60			0.90		3.24		
			1	3.00			0.90		2.70		
			1	1.20			0.90		1.08		
			1	1.80			0.90		1.62		
			1	5.40			0.90		4.86		
			1	4.20			0.90		3.78		
			1	6.80			0.90		6.12		
	3rd Main Road										
	W/S		1	1.20			0.90		1.08		

ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ವಿಶೇಷ ವ್ಯಾಪ್ತಿ ಯೋಜನೆಗಳ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ, ಬೆಂಗಳೂರು

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು ಮಾಡಿರುವ ಅಳತೆಯನ್ನು ಪರಿಶೀಲಿಸಿ ಸರಿಯಾಗಿದೆ ಎಂದು ದೃಢೀಕರಿಸಿದೆ

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A12-09

AEE (VRP) SD

Sl No.	Chainage			Mesurement No.	L	B1	B2	Av.,B	D	Qty	Rate / Unit	Amount
				1	7.20			1.20		8.64		
				1	3.60			0.90		3.24		
				1	10.80			0.90		9.72		
				1	6.60			0.90		5.94		
				1	1.80			0.90		1.62		
				1	10.20			0.90		9.18		
				1	1.80			0.90		1.62		
				1	3.00			0.90		2.70		
				1	12.00			0.90		10.80		
	E/S			1	0.60			0.90		0.54		
				1	9.00			0.90		8.10		
				1	18.00			0.90		16.20		
				1	0.60			0.90		0.54		
				1	12.20			0.90		10.98		
				1	0.60			0.90		0.54		
				1	15.00			0.90		13.50		
				1	15.00			0.90		13.50		
				1	3.70			0.90		3.33		
			Total Qty =							5117.05		
			Deduct Previous Qty =							-4856.86		
			Present 7th Bill Qty to be Paid =							260.19	2175.19	565963.00

Assistant Engineer
New Ward No. 14

Assistant Executive Engineer
Vidyaranyapura Sub Division

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

Macadez Core Technologies Private Limited

Sl No	Chainage		Mesurement						Qty	Rate / Unit	Amount
			No.	L	B1	B2	Av.,B	D			
	Measurements Recarded on :										
14	Providing and Fixing pre cast covering Slab 230mm thick made out of CC , Jelly 20mm Down Size with steel reinforcement including form work, curing, including cost of all materials, labour, hire charges of machinery, loading, unloading, lead and lift, transportation etc, complete as per Engineer incharge. (Data Rate)									Cum	
			Previous Qty Vide 7th and Part Bill Qty =						680.34		
	230mm Covering Slab										
	For Culverts										
	1st Main road-Cross road Jun		1	4.80			1.20		5.76		
	3rd Main road-6th A Cross Jun		1	6.70			1.20		8.04		
	3rd Main road-4th A Cross Jun		1	5.30			1.20		6.36		
			Total Qty =						700.50		
			Deduct Previous Qty =						-680.34		
			Annexure - 1 Present 8th Bill Qty to be Paid =						20.16	5287.84	106603.00

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Vidyaranyapura Sub Division

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Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

Sl No	Chainage			Mesurement No.	L	B1	B2	Av.,B	D	Qty	Rate / Unit	Amount
	Measurements Recarded on :											
15	Providing and fixing Steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete. Electric resistance or induction butt welded tubes including cost of materials, labour, usage charges of machinery complete as per specifications and as per directions of the Engineer-in-Charge.										Kgs	
				Not executed								
16	Earth work in surface excavation by mechanical means for lowering & leveling the ground for all works other than foundation in all kinds of soils & upto depth not exceeding 300mm as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter including dressing of excavated surfaces, disposing off or levelling the excavated earth or sorting & stacking the selected earth for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools, usage of machinery & other appurtenances required to complete the work.										Cum	
				Previous Qty Vide 7th and Part Bill Qty =						**2127.98**		
				Present Qty Vide Pre-Measurement Page No. =						**219.64**		
				Total Qty =						**2347.62**		
				Deduct Previous Qty =						**-2127.98**		
				Annexure - 1 Present 8th Bill Qty to be Paid =						**219.64**	75.06	**16486.00**
17	Scarifying the existing bituminous road surface to a depth of 50 mm and disposal of scarified material by Mechanical Means using Hydraulic excavator with in all lifts and lead MORTH Specification No. 305.4.3										Sqm	
				Previous Qty Vide 7th and Part Bill Qty =						**695.06**		
				Present Qty =						**NIL**		
18	Construction of Granular Sub-Base of required grading as per design mixing in a mechanical mix plant at OMC, carriage of mixed Material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per clause 401 (For Grading -V Material)										Cum	
				Previous Qty Vide 7th and Part Bill Qty =						**344.10**		
				Present Qty =						**NIL**		
19	Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver/grader in sub-base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density MORTH Specification No. 406										Cum	
				Previous Qty Vide 7th and Part Bill Qty =						**1819.03**		
				Present Qty Vide Pre-Measurement Page No. =						**219.64**		
				Total Qty =						**2038.67**		
				Deduct Previous Qty =						**-1819.03**		
				Present 7th Bill Qty to be Paid =						**219.64**	2764.54	**607204.00**
20	Providing and applying primer coat with SS1 grade Bitumen Emulsion on prepared surface of granular base including cleaning of road surface and spraying primer at the rate of 0.90 kg per m2 using mechanical means										Sqm	
				Previous Qty Vide 7th and Part Bill Qty =						**9456.56**		
				Present Qty =						**NIL**		

AB-04

AEE (VRP) SD

Sl No	Chainage			Mesurement					Qty	Rate / Unit	Amount
			No.	L	B1	B2	Av.,B	D			
21	Providing and laying Dense Graded Bituminous Macadam with 40/60 TPH capacity HMP using crushed aggregates of specified grading, premixed with bituminous binder VG-30, @ 4.5 per cent by weight of total mix and filler, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRTH specification clause No. 505 complete in all respects									Cum	
			Previous Qty Vide 7th and Part Bill Qty =						**424.58**		
			Present Qty =						**NIL**		
22	Providing and applying tack coat with RS1 Bituminous Emulsion using emulsion pressure distributor at the rate of 0.25 kg/m2 on the prepared bituminous surface cleaned with mechanical broom MORTH Specification No. 503									Sqm	
			Previous Qty Vide 7th and Part Bill Qty =						**18814.81**		
			Present Qty =						**NIL**		
23	Providing and laying Bituminous Concrete with 40/60 TPH capacity hot mix plant using crushed aggregates of specified grading, premixed with bituminous binder VG-30, @ 5.4 percent of mix and filler, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade,level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No. 507 complete in all respects									Cum	
			Previous Qty Vide 7th and Part Bill Qty =						**753.01**		
			Present Qty =						**NIL**		
24	Road Marking with Hot Applied Thermoplastic Compound with Reflectorising Glass Beads on Bituminous Surface Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads @ 250 g/ m2 area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35:2015.The finished surface to be level, uniform and free from streaks and holes. MORTH Specification No. 803									Sqm	
			Previous Qty Vide 7th and Part Bill Qty =						**695.92**		
			Present Qty =						**NIL**		
25	Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 m3 in volume and stock piling at designated locations and disposal of dismantled materials and stacking serviceable and unserviceable materials separately MORTH Specification No. 202									Cum	
			Not Executed						**0.00**		
26	Providing and laying in position plain cement concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork shall be paid separately) Mix 1:5:10 Using 40 mm nominal size graded crushed coarse aggregates									Cum	
			Previous Qty Vide 7th and Part Bill Qty =						**140.96**		
			Present Qty =						**NIL**		

AEE (VRP) SD

Sl No	Chainage			Mesurement					Qty	Rate / Unit	Amount
			No.	L	B1	B2	Av.,B	D			
27	Providing and constructing un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base, with 43 grade cement or any other type as per Clause 1501.2.2 M30 (Grade), coarse and fine aggregates conforming to IS:383, maximum size of coarse aggregate not exceeding 25 mm, mixed in a concrete mixer of not less than 0.2 cum capacity and appropriate weigh batcher using approved mix design, laid in approved fixed side formwork (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the formwork as per drawing), spreading the concrete with shovels, rakes, compacted using needle, screed and plate vibrators and finished in continuous operation including construction joints, , primer, sealant , curing of concrete slabs for 14- days, and water finishing to lines and grade as per drawing and technical specification clause 1501 with all lead, lifts, loading & unloading charges, cost and conveyance of all materials, labour, equipments etc., complete MORTH Specification No.1501 . as per the directions of the Engineer-in-charge of the work.									Cum	
									Previous Qty Vide 7th and Part Bill Qty =	**140.96**		
									Present Qty =	**NIL**		
28	Cutting transverse contraction joints 3 to 4 mm wide and depth 60mm in concrete slab using concrete cutting machine with diamond studded saw within 48 hours of casting of bay / slab etc. complete including subsequent widening of the groove 8 to 10 mm. wide at top having depth of 15 mm. as directed by Engineer incharge. MORTH Specification No. 602.6.3									Mtrs	
									Present 7th Bill Qty to be Paid =	**257.83**		
									Present Qty =	**NIL**		
29	Providing to contraction joints polysuphide sealent (Pouring grade) confirming to BS : 5212 - 1989 into sawed groove widened at top for sealent reservoir of specified size and shape as per detailed drawing including fixing Polyethylene foam backer rod of required diameter (approx. 25% larger than the initial 3 mm.to 4 mm. joint) overlaid with bond breaking tape as per detailed drawing. Item includes cleaning the joints with water jet / air compressor and allowing joint to become thoroughly dry before sealent is applied and applying primer. (A) Contraction and longitudinal joints (15 mm. deep x 8mm.wide). MORTH									Mtrs	
									Present 7th Bill Qty to be Paid =	**257.83**		
									Present Qty =	**NIL**		
30	Loading and Unloading of Stone Boulder / Stone aggregates / Sand / Kankar / Moorum.									Cum	
									Previous Qty Vide 7th and Part Bill Qty =	**11620.68**		
									Present Qty Vide Item No. 04 & 16	**1121.24**		
									Total Qty =	**12741.92**		
									Deduct Previous Qty =	**-11620.68**		
									Annexure - 1 Present 8th Bill Qty to be Paid =	**1121.24**	136.26	**152780.00**
31	Cost of Haulage Excluding Loading and Unloading, Case-1 : Surfaced Road A Taking output 10 t load and lead 10 km = 100 t.km									T.Kms	
									Previous Qty Vide 7th and Part Bill Qty =	**14874.49**		
									Present Qty Vide Item No. 30 * 1.28	**1435.19**		
									Total Qty =	**16309.68**		
									Deduct Previous Qty =	**-14874.49**		
									Annexure - 1 Present 8th Bill Qty to be Paid =	**1435.19**	110.86	**159105.00**
											Sub Total =	**5899930.00**
											Add GST 18% Charges =	**1061987.00**
											Grand Total =	**6961917.00**

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